

AMINO ACID AND/OR NUCLEOTIDE SEQUENCE LISTING SUBMISSION

Electronic Version v13

Stylesheet Version v01

APR 28 2003

This is a request for filing the electronic Computer Readable Form copy of a sequence listing via the Electronic Filing System for a patent application under 37 CFR 1.821-1.825 instead of via one of the physical media specified in 37 CFR 1.824(c).

This communication has an attached file which is an electronic copy of the amino acid and/or nucleotide sequence listing for the previously mentioned United States patent application.

The electronic copy submitted herewith is the Computer Readable Form (CRF), as required by 1.821(e).

Any applicable fees associated with the filing of the electronic copy have been paid.

This submission does not go beyond the disclosure of the application as originally filed (i.e., contains no new matter). It may be in addition to an original CRF, filed to comply with the sequence rules.

This submission in electronic form comprises only the CRF of 37 CFR 1.821(e). I acknowledge that I am responsible for all additional requirements of amino acid and/or nucleotide sequence listing submissions as specified in 37 CFR 1.821 - 1.825.

This submission does not go beyond the disclosure of the application as originally filed (i.e., contains no new matter), and/or is in addition to an original CRF filed to comply with the sequence rules. If not made to comply with an originally filed CRF, it is identical to the sequences disclosed in the application as originally filed and/or the paper copy of the sequence listing as originally filed.

I hereby certify that this correspondence is being transmitted to the United States Patent and Trademark Office on the following date: 2003-04-22

Name: David P. Halstead

Electronic Signature Mark: DYH

Attachment description:

Substitute CRF Biosequence

Compression software used: